

**CLAIMS**

What is claimed is:

1. A system comprising:
  - 5 a first processor including a first processor data channel;  
a first hybrid switching module including a first hybrid switching module processor data channel, a first hybrid switching module main data channel, a first input/output link data channel, and a first switch, the  
10 first hybrid switching module processor data channel being coupled to the first processor data channel;  
a first main bus coupled to the first hybrid switching module main data channel;
  - 15 a second processor including a second processor data channel; and  
a second hybrid switching module including a second hybrid switching module processor data channel, a second input/output link data channel, and a second  
20 switch, the second hybrid switching module processor data channel being coupled to the second processor data channel, the second input/output link data channel being coupled to the first input/output link data channel.
- 25 2. The system of Claim 1 wherein said second hybrid switching module further comprises a second hybrid switching module main data channel, wherein said system further comprises:  
a second main bus coupled to the second hybrid  
30 switching module main data channel.
3. The system of Claim 1 further comprising:  
a third processor including a third processor data channel; and

a third hybrid switching module including a third hybrid switching module processor data channel, a third input/output link data channel, a fourth input/output link data channel, and a third switch, the  
 5 third hybrid switching module processor data channel being coupled to the third processor data channel;

wherein said first hybrid switching module further comprises a fifth input/output link data channel;

wherein the third input/output link data  
 10 channel is coupled to the fifth input/output link data channel;

wherein said second hybrid switching module further comprises a sixth input/output link data channel;

wherein the fourth input/output link data  
 15 channel is coupled to the sixth input/output link data channel.

4. The system of Claim 3 wherein said second hybrid switching module further comprises a second hybrid switching module main data channel, wherein said system  
 20 further comprises:

a second main bus coupled to the second hybrid switching module main data channel.

25 5. The system of Claim 4 wherein said third hybrid switching module further comprises a third hybrid switching module main data channel, wherein said system further comprises:

a third main bus coupled to the second hybrid  
 30 switching module main data channel.

6. A apparatus comprising:

a hybrid switching module processor data channel;

a hybrid switching module main data channel;  
an input/output link data channel;  
a switch coupled to the hybrid switching module  
processor data channel; and

5 a bridge coupled to the hybrid switching module  
main data channel;

wherein the switch selectively couples to the  
bridge and selectively couples to the input/output link  
data channel, wherein the hybrid switching module  
10 processor data channel is thereby selectively coupled to  
the bridge and selectively coupled to the input/output  
link data channel.

7. The apparatus of Claim 6 further  
15 comprising a processor coupled to the hybrid switching  
module processor data channel.

8. The apparatus of Claim 6 further  
comprising a main bus coupled to the bridge.

20 9. The apparatus of Claim 6 further  
comprising another switch coupled to the input/output  
link data channel.

25 10. The apparatus of Claim 9 further  
comprising another bridge coupled to the other switch.

11. The apparatus of Claim 10 further  
comprising:

30 a first main bus coupled to the bridge; and  
a second main bus coupled to the other bridge.

12. The apparatus of Claim 9 further  
comprising:

a first processor coupled to the hybrid switching module processor data channel; and

a second processor coupled to another hybrid switching module processor data channel, the other switch  
5 being coupled to the other hybrid switching module processor data channel.

13. A system comprising:

a hybrid switching module processor data  
10 channel;

a hybrid switching module main data channel;

a hybrid switching module bus data channel;

an input/output link data channel; and

a hybrid switching module coupled to the hybrid  
15 switching module processor data channel and to the hybrid switching module main data channel;

wherein the hybrid switching module selectively couples to the a hybrid switching module bus data channel and selectively couples to the input/output link data  
20 channel, wherein the hybrid switching module processor data channel is thereby selectively coupled to the hybrid switching module bus data channel and selectively coupled to the input/output link data channel.

25 14. The apparatus of Claim 13 further comprising a processor coupled to the hybrid switching module processor data channel.

15 15. The apparatus of Claim 13 further comprising a main bus coupled to the hybrid switching module bus data channel.

16. The apparatus of Claim 13 further comprising another hybrid switching module coupled to the

input/output link data channel.

17. The apparatus of Claim 16 further comprising:

- 5           a first main bus coupled to the hybrid switching module; and  
          a second main bus coupled to the other hybrid switching module.

10           18. The apparatus of Claim 16 further comprising:

- a first processor coupled to the hybrid switching module processor data channel; and  
          a second processor coupled to another hybrid  
15 switching module processor data channel, the other hybrid switching module being coupled to the other hybrid switching module processor data channel.

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